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**W. J. Gage & Co's Manuals for Teachers.**

THE PROBLEM  
OF  
**TEACHING TO READ**  
RESTATED AND  
ATTEMPTED TO BE SOLVED

*WITH SUGGESTIONS FOR METHODS AND PLANS*

BY

**J. M. D. MEIKLEJOHN, M.A.,**

TRANSLATOR OF KANT'S 'CRITIQUE OF PURE REASON,' AND PROFESSOR  
OF THE THEORY, HISTORY, AND PRACTICE OF EDUCATION  
IN THE UNIVERSITY OF ST. ANDREWS.

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# THE PROBLEM OF TEACHING TO READ.

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THE problem of teaching children to read has, in my belief, never yet been fully faced or thoroughly solved. There is no similar problem in Germany; a somewhat similar—but not nearly so difficult—problem exists in France. But it is only in England—of all the countries of Europe—that we meet with the problem in a form of extremest difficulty; and the want of a solution that shall bring confidence with it into all our Primary Schools makes itself still everywhere felt.

We seem to be all so thoroughly familiar with it, and we have all talked about it so much and discussed it so often, that it almost seems a superfluity to raise or to examine the question over again.—The fact is, that familiarity is the greatest enemy of knowledge. We have lived all

#### **4 FAMILIARITY THE ENEMY OF KNOWLEDGE.**

our lives in a town ; and we fancy we know it, and its history, and the inhabitants, and all about it. A stranger comes and asks us a simple and easy question ; and we are unable to answer it. So, many people who have spent all their lives in London imagine they 'know' London.—A village stands at the foot of a range of mountains, and many generations have been born into the valley and have died out of it ; but no man, woman, or child ever suspected what lay in the strata of the mountains they had been looking upon all their lives. At length comes some stranger who has studied geology and mineralogy, and he applies his knowledge to these old, old phenomena, and from the character of the rocks and the dip of the strata, he tells the people there is copper there, and where it will most probably be found. 'Copper !' says the oldest inhabitant. 'I have lived here man and boy for the last eighty years ; and my father and his father before me ; and I never saw or heard of such a thing. It is against all experience.' It is against *his* experience ; but then his mind was only the mind of his own eyes—the mind of eyes with no thought or questioning power at the back of them ; and he was so familiar with everything that he could imagine nothing new in the old set of sights that had met his eyes for so many years. Thus it is plain that it is not ignorance—but familiarity—that is the enemy of knowledge. Ignorance is a clean sheet of white paper, on which we can write anything ; but familiarity is a palimpsest, on which many

writings and drawings have been carelessly and thoughtlessly scored, so that upon the blurred and blackened manuscript there is sometimes room for no more.

I venture to think that there are still several new and true words to be said about teaching to read, and that the problem still awaits discussion from new points of view by fresh minds. The new interest that has arisen in education on the one hand, and the new discoveries that have been made in philology and in the English language on the other, authorise us in cherishing a hope that some good result may be obtained from a new and careful examination of our English mode of writing down sounds.

For indeed the problem has two sides—the philological side and the educational side. As a question in philology, we ask ourselves: What kind of alphabet have we? How do we use it? Has it grown up like Topsy, or has it been carefully adapted to the sounds we all use? For we must not forget that the language itself—the real English language is not a set of writings, but a *tongue* or a *speech*; that we speak thousands of words for every one we write; that writing or printing is only a more or less convenient device—but is no necessary part of any language.

On the educational side, the question arises: How shall we put this set of black marks—this notation—into the minds of our children? What are the natural motives and desires that we can

## 6 HOPES FROM NEW KNOWLEDGE OF ENGLISH.

appeal to for help in this process? How shall we induce our young children to take kindly to the learning—so that it may be welcome and a pleasure, and not painful and a labour? What powers of feeling, imagination, or intellect—because there is intellect even in the dullest and youngest—ought the Teacher to appeal to in his self-imposed task of training the child to read?

It is the purpose of the present writer, in this short paper, to try to answer these questions; and he hopes that, in the course and as the result of the discussion, something may be discovered that may redound to the benefit of Elementary Instruction in this country.

The examination of our English notation, in the light of the new science of philology, was hardly possible before the present generation. Everybody knew that our mode of 'spelling,' as it is called, is 'irregular' and 'anomalous' and a great many other things; but then this was looked upon simply as the whim of our fine old mother-tongue—and as one of those little insular peculiarities which baffled and confused the foreigner, and was only another mark of our superiority to people born on the wrong side of the English Channel. But we had neither the knowledge, nor could we have the aloofness and detachment of mind, which would enable us to see our notation as it is—and to describe its divergencies from a perfect or regular notation. Now, however, that the History of our English tongue is becoming more and more studied, and

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the knowledge of it spread abroad more and more widely, we are able to compare our notation with the alphabets or notations of other languages; and—what is still more interesting—we are able to give a historical account of almost every malformation or irregularity in our mode of printing our spoken language.

The History of the English Language tells us, in fact, that we never had—that we never have been able to achieve anything like regularity or common business-like self-consistency in the way of writing it down. It began to come over to this island in the fifth century—a poor rough guttural speech, in the mouths of hardy young men; and it probably remained unwritten until the eighth century. It lived in this island in different forms or dialects in different parts of the island; and the English of the Isle of Wight no doubt differed from the English of the Mercians as much as that differed from the speech of the Anglian peasant of Norfolk. If one dialect shewed any tendency to coalescing with the others, and thus giving a harmonious development to our English speech, that tendency and that development were rudely interfered with by the irruptions of the Danes, who brought with them only another dialect of the same Teutonic speech—a dialect which preferred hard gutturals, like *k*, to soft gutturals like *g*, or aspirates like *ch*. The effects of this disturbance might have been eliminated, and some attempts at harmonious spelling made by the English scribes, had it not been for

the sudden and forceful importation of an entirely different language—a language not belonging to the Teutonic stock at all, but to the stock called Pelasgic, the branches of which are to be looked for in the Southern Peninsulas of Europe. The incoming of the Norman-French, who took the land, seized every high place in the state, shut out Englishmen from all but the lowest offices in the Church—who imported their own language, modes of warfare, law, and political constitution, again arrested the harmonious development of our mother-tongue. From 1066 to 1362—three centuries all but four years—the Norman-French tongue was employed in courts of law; and the English yeoman could not plead or bring an action in his own language; and even English boys—as John de Trevisa tells us—had to construe their Latin into the French idiom. The English language remained in a disintegrated form—spoken in a different fashion and with differing vowel-sounds in the North, the South, the East, and the West; and for about two centuries it was hardly written at all. Any literature that existed in French was chiefly an importation and an exotic; and, though many Norman-French words were contributed to our language, its influence upon the writing down of English was wholly bad and confusing. For three centuries the two languages faced each other; and, though English, under the influence of French, entirely changed the build of its sentence, no influence for the better from it affected our notation. In fact, French—and

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especially Norman-French—was as bad in that respect, as we shall presently see, as our own English marking.

The English language practically remained—both for the ear and upon paper—a conglomerate of different dialects, with little or no tendency towards convergence, with perhaps a greater centrifugal than centripetal habit. The vowel-sounds differed, and the modes of writing them were different; certain consonants were favourites in one place and rejected in another; and there was no uniform mode of spelling English down even as late as the end of the sixteenth century.

Our English notation having been thus left uncultivated and uncared for during many centuries, there now appeared upon the scene a force which might have done much for it, but which in reality did little or nothing—but a good deal against it.

This force was the Revival of Learning, which introduced the nation to the riches of Greek and Latin literature, and made learning an established power in England. It introduced us to books; and from these books—through the eye, and not through the ear—there came into our mother-speech thousands of words like *virtue*, *suggestion*, *opinion*, *alter*, *determine*, and so on. But these Latin words were perfectly regular, and were written in a quite self-consistent and harmonious notation; and, being introduced by the eye from books, mistakes were not made in the transcription or the printing of them, but they were transferred

## 10 THE DIALECTIC CHARACTER OF ENGLISH.

bodily and without change, into our own language. But all this time English notation—and even English style—was little cared for. Scholars wrote in Latin; and even as late as the time of Milton and Waller—well on into the seventeenth century, and after the appearance of our great dramatic literature—it was thought the right thing to compose in Latin. Milton thought of writing the works he hoped to live by in Latin; he was Foreign (or Latin) Secretary to Oliver Cromwell; and Waller goes so far as to say :

Poets that lasting marble seek  
Must carve in Latin or in Greek.  
*We* write in sand; our language grows;  
And, like the tide, our work o'erflows.

This merely dialectic character, then, our language has never been able to throw off. It is still, in style, in vocabulary, and above all, in its notation, a conglomerate of dialects—a pudding-stone of local varieties. We possess, in fact, not one notation—but three. These three are the English, the Norman-French, and the Latin. Of these three, the English notation is the worst; the Norman-French is very bad; while the Latin notation is perfect.

But the whole of our language, as it is written down at present, is a blurred palimpsest; and the eye of the child is confused and demoralised by the attempt to decipher it. The page is scored all over with dialectic notations—for the language grew simultaneously from different centres, with

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fragments of Norman-French writing, and with fragments of classical Latin, not to mention the errors of copyists;\* and this is what English children have to be taught. The language is full of marks—like *w*, *y*, *i*, *gh*, and *e*—which have no meaning or force whatever to the child, which are simply of value to the philologist as history;† while they are ‘stumbling-blocks and rocks of offence’ in the primary schoolroom.

The dialectic character of the language is every-where visible. Among scores of instances there is one that shews how our traditional usages of writing and pronouncing not only hinder the progress of the child, but obscure the plainest facts of the language. The simple symbol *one* we pronounce as if it were written *wun*. That is, we have adopted, for this word, a Dorsetshire or West of England pronunciation. We say *wun*; but we draw the line there, and we do not go on to say *wuts* for *oats*, or *woak* for *oak*. Again, in the compounds of o-n-e, we entirely discard the Dorset-shire pronunciation, and give it the simple sound which all analogy entitles it to have, and make it rhyme with *tone*. Thus in *only*, *alone*, and *atone*,‡ *one* has its correct and ‘natural’ sound.

\* Such as the philological blunder of the *g* in *foreign* and *sovereign*; and the vulgar blunders in *tongue*, *grocer*, *foxglove*, &c.

† The gutturals of our language now disguise themselves as *w*, *gh*, *y*, *i*, &c.—as *w* in *sorrow*, as *gh* in *light*, as *y* in *day*, and as *i* in *hail*.

‡ *Atone*, in the sixteenth century, meant to come together into one. Thus Shakespeare has (in *As You Like It*, V. iv. 116):

‘When earthly things, made even,  
Atone together.’

It is unnecessary for our present purpose to go into the question of what an alphabet is, or of its history. It may suffice here to mention that all our present European alphabets seem to be decayed fragments of a pictured speech. The steps seem to be: picture; symbol; letter; and thus a letter is a short-hand representation of that which was once a more or less elaborate picture of an external thing. But, whatever may have been the past history of a letter, its use now—its only function at present is to serve as a signal. The three letters *hat* serve as a signal to the child or other reader to say *hat*. There is to us in the present day no necessary relation between the sound *hat* and the letters which mark the sound upon paper; and the names of the letters—*atch*, *eh*, *tea*, are, for the ordinary and unphilological reader, just as arbitrary, accidental, and essentially meaningless.

If, then, an alphabet can be fairly regarded as a *code of signals*, we have a new stand-point from which to examine our own alphabet. There are two necessary conditions of every good code of signals, and it is absolutely necessary that both of them be observed with the most minute accuracy. These two conditions are:

1st, Every signal must correspond to and ask for one thing and one thing only; and

2d, Each thing must be asked for by only one signal.

At first sight, these two conditions seem to

sent purpose to go be the same—only stated in different ways. Alphabet is, or of its But a little reflection will shew that this is mention that all not so.

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If, for example, in H.M. navy, the signal of 456 asked a neighbouring ship for a tub, or a kind of shot, or a piece of rope, we should have the first canon violated; while, if gunpowder could be called for by some two or three signals—450 or 326 or 125—we should have the second condition not observed. Now this was just the condition of things in the navy before the time of Captain Marryat, the well-known novelist. The code of signals then in use had grown up by tradition; it was a mass of confusion; there was no principle in it; and blunders and even misfortunes were the result. But Captain Marryat took it in hand, introduced order and self-consistency into the notation and the practice of it; and I believe that his system is still at work in the British navy.

We expect, and the young child also naturally expects to find the signs written or printed on paper observe these two simple conditions. Every child expects—and his expectations on this head are both ‘natural’ and reasonable—that the form of a word shall change when the sound changes; and that the sound shall remain the same with the same form. How are these natural and reasonable expectations met? **N**o is *no*; add a **w**, and it is *now*. So far we are on firm ground. But put a **k** in front of *now*; and it is *no* again. Take the symbol **ow**, and add **c** to it,

and it makes *cow*; but add *l* to it, and it is *low*. **O**n is *on*; and here again we are quite safe. But take one little—the very least step farther; and we are plunged into the middle of one of our south-western dialects. Add *e* to *o n*; and it becomes *wun*. But put *all* in front of it, and it is revived; it recovers its ancient habit, and becomes the regular and respectable *alone*. But front it with a *g*, and it is *gone*; with a *d*, and it is *done*. **E**re *e* is *ere*; add *h*, and it is *here*; add *th*, and it is *there* again. **Y**es *e* is *yes*; but place an *e* in front of it, and it becomes *eyes*. Such is the manner in which our language keeps faith with the expectations of the child; at every third word it alters its course—it perpetually ‘breaks the word of promise to the hope,’ because it can keep it neither with eye nor with ear.

He expects, moreover, that the letters should be a guide to him in the recognition of the word. A letter, too, he thinks, will always stand for one sound; and one sound will be represented on paper by only one letter. If a letter stands for several sounds, it will be in the confusing condition of the signal that may call for several things; if a sound is represented by several letters, then the second malformation attaching to a code of signals could be asserted of this procedure. But, if one letter stands for only one sound, and one sound is always represented by only one letter, the child gradually accustoms himself to associate the one with the other; his expe-

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rience is always true and self-consistent; and every act of attention he makes goes to the good—goes to build up the edifice of his knowledge.

But, in the most genuinely English part of the language, this is not at all the case. It is not only not the truth; it is the very opposite of the truth. The child's experience is more upset in the notation of the words which are the native words of his own mother-tongue, than in any other part of our national language. The two malformations which infest our speech are there found in the highest degree and in their most virulent form. These two malformations are:

1st, **One symbol** or printed sign may be interpreted to the ear in from **two to nine different ways**. This is seen in the well-known case of the symbol *ough*, which is translated into sound in nine different ways. Thus:

B	<b>ough</b>	=	<b>ow</b>	The symbol ( <i>ough</i> ) remains the same; but the sound — which varied in the old dialects of England —still varies.
Bor	<b>ough</b>	=	<b>ü</b>	
C	<b>ough</b>	=	<b>off</b>	
En	<b>ough</b>	=	<b>uff</b>	
H	<b>ough</b>	=	<b>ock</b>	
Hicc	<b>ough</b>	=	<b>up</b>	
Th	<b>ough</b>	=	<b>ō</b>	
Thr	<b>ough</b>	=	<b>oo</b>	
Thor	<b>ough</b>	=	<b>ō</b>	

16 ONE SOUND WITH DIFFERENT SYMBOLS.

2d, The second malformation consists in this—case of that the sound remains the same, but the symbol or way of writing or printing it—is constantly changing. Thus we have:

W	ai	t	}	= a
W	eigh	t		
Gr	ea	t		
Th	ey			
S	ay			

Here there are five different symbols to represent to the eye one sound.

These two phenomena are the parents of difficulties and confusions, 'never ending, still beginning,' which are felt every year in the infant and younger classes of our schools; but, because the nature of them has not been fully examined and exactly estimated, no complete remedial measures have as yet been taken.

But perhaps the words which we received from the Norman-French settlers—words several thousands of which we still have, like *palace*, *peer*, *parliament*, and others—will be of better and more regular formation, and will help the child with kindly experiences. Perhaps the symbols in them will be always true to the sounds; and the sounds to the symbols. Not so. The case is nearly as bad in the Norman-French words as in English. The two malformations exist there in quite as pronounced a fashion, though not in quantity so large. Thus we have the first malformation—the

consists in this—case of the **fixity of the symbol**, and the fluctuation, but the **symbolization** and uncertainty of the sound:—mentioning it—is con-

ve:

Here there are five different symbols to present to the eye sound.

parents of differing, still beginning in the infant and but, because they examined and medial measures

we received from lands several thousand palace, peer, of better and help the child the symbols in sounds; and the case is nearly as in English.

are in quite as in quantity so formation—the

T	ou	r ist	=	oo
P	ou	l try	=	o
C	ou	n ty	=	ou
C	ou	n try	=	ū

And we have also the second malformation, where the **one sound** is rendered to the eye in several various forms—where the **sound is fixed**, and the **symbol fluctuates**.—Thus we have:

I	ss	ue	}	= ū
V		iew		
B		eau		
N		ui		
N		ew		

P	eo	ple	}	= ē
Rec	ei	ve		
Rel	ie	f		
Fat	i	gue		
Est	ee	m		

Now an alphabet which spells a long ē with an o or an ie or an ei or an i; or which spells a long with an ue, or an iew, or an eau, is not one

which is of very great value for the learner. It is an alphabet which is true to its past ; but the gold lace and the cord and the tags and the broad flaps and the other ancient decorations of the coat only serve to make its inadequacy to the use of the child all the more marked and ridiculous.

What, now, of the LATIN NOTATION ? It is quite regular ; as is plain from the following :

D	ate	Sound and Symbol always in Complete Accord	Con	sume
R	ate		Pre	sume
St	ate		Re	sume
In	fer		Sub	vert
Re	fer		In	vert
Con	fer		Con	vert

But, though it is so perfectly regular, unfortunately for its use to us as Teachers, its vocabulary relates to a set of conceptions which do not exist in the mind of a child. What child learning to read knows or understands the words *resume*, *invert*, or *refer*? The Latin words in our language are terms more or less abstract ; they are the algebraical marks for totals of experience which the child has never had ; they form ideas or marks for a multitude of data not one of which has ever been placed in the child's daily life or experience. Our Latin notation must, therefore, for our present purpose, be left out of the count.

Now the two double and doubly fallacious

the learner. It is nations of English and Norman French are past; but the gold is picked up in ordinary speech and narrative; and the broad flaps of the coat only a child is set to learn this mixture. He has to learn to the use of them, and work it into his mind by some process which it is very difficult for us to ascertain or to value. What is this process?

NOTATION? It is his actual experience, as he goes through this process? The following is the

Con	sume
Pre	sume
Re	sume
Sub	vert
In	vert
Con	vert

regular, unfortunate. In our language, its vocabulary, which do not exist, child learning to use the words *resume*, in our language. They are the experience which come from ideas or marks of which has ever been or experienced, for our present

Here he sees a long *ō* written down in thirteen different ways. Amongst this confusion, he meets such signs as *w* in *owe* or *gh* in *sigh*, which present a vanished guttural. He sees a long *i*

## EXPERIENCE OF HIS EYE:

1. B oat	= ā	1. W ise
2. T oe		2. B uys
3. Y eo man		3. P ies
4. S ou l		4. E yes
5. S ow		5. S ize
6. S ew		6. G uise
7. N ote		7. S ighs
8. B eau		
9. H au thboy		
Owe		
Fl oo r		
Oh!		
O!		

20 THE EXPERIENCE OF THE CHILD'S EAR.

with an *s* printed in seven different ways; and the sound he renders it by is always the same.

Under these circumstances, the scholar's confidence in what he sees is shaken; he cannot believe his eyes.

On the other hand, the following is the

EXPERIENCE OF HIS EAR:

1. S	ea	m	}	One
2. St	ea	k		Symbol
3.	Ea	rth		equal to
4. H	ea	rth		Six
5. Br	ea	d		Sounds
6. Y	ea			

1. Conc	ei	ve	}	One
2. H	ei	ght		Symbol
3. V	ei	n		equal to
4. H	ei	fer		Four Sounds

The child is told six different ways of sounding one mark. He cannot believe his ears.

But the eyes and ears of the child are the only channels for his knowledge—the only avenues of learning; and, if these are blocked up, it is difficult for knowledge to get into his mind.

The Eye is trifled with, and a multitude of confusing appearances presented to it; and so

different ways; and always the same. The scholar's con-

tention; he cannot belie-

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HIS EAR:

One  
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attention and the memory of the child are weakened from the very outset.

The Ear is not kept faith with; the child has given different sounds to the same symbol; what he has to give is always a question with him; and his judgment is puzzled.

There is no firm footing in the symbol—that is unacceptable of the most various interpretations; there is no reliance on the sound—that varies even with the same symbol, or remains the same with the most contradictory-looking symbols. The child then cannot trust to his senses; these are outraged and disappointed in every way. The teacher must, therefore, train the child's mind; he must look to every quarter of the intellectual horizon for what help he can get. He must also train or arrange the *mind of the language*, that is, he must so engineer it as to provide a gentle gradient for the children to walk up.

What the child has to do is not merely to make himself acquainted with 26 symbols of a fixed and permanent value, but with a very large number of self-contradictory habits of a people who were never allowed by circumstances to reach a harmonious development, so far as the lettering of their words was concerned. He sees contradictions all around; he sees

CONTRADICTIONS of ENGLISH with NORMAN-FRENCH marking, of NORMAN-FRENCH with LATIN marking, of LATIN with ENGLISH marking, and of all with themselves and with each other.

In the two chief Notations there are

## CONTRADICTIONS OF

SOUND	{	with	SYMBOL
EAR		{	EYE

SYMBOL	{	with	SOUND
EYE		{	EAR

The philological explanation of all this is, them w  
has been said, that the English language is a vacomical  
conglomerate or pudding-stone made up of sevenit is th  
different and distinct home-dialects, as well as French  
Norman-French and of Latin elements. It consequence  
quently possesses all or parts of all the notation of their n  
of all these dialects and languages. And tenses, t  
error perpetually made in our primary schools ployed  
that the child is taught all these systems at tbut in  
same time—as if they were all of one class, wit not to p  
out the slightest sense that he is asked to people s  
something that would be extremely difficult f English  
a grown-up man. He has to learn to recogniffully, b  
with promptitude and immediateness from twand nigr  
to five different systems of notation, mixed with more  
fragments from others!

It will be seen that this irregularity and wa could n  
of keeping faith fall chiefly upon the vowels. Wcribes:  
have in our language 104 ways of representing sound o  
the eye 13 vowel-sounds. Let us take a few of the attural  
most striking cases. Short *i* is represented in or they str  
English notation by 13 symbols; short *e* by 12; just  
long *ē* by 11; long *ā* by 13; short *ō* by 11; long *ū* by 13;  
by 13; short *ꝑ* by 13; and long *ū* by 12. We, while Norr  
are grown up, have been so long accustomed to her; g

NS OF  
 { SYMBOL  
 EYE  
 { SOUND  
 EAR

of all this is, them we make an *f* of it. The story of the *gh* is language is a vacomical enough. As nearly as I can make it out, made up of seven is this: The Normans, who had been learning lects, as well as French for several generations, had as a consequences. It consequence been throwing aside and leaving unuttered of all the notation of their native guttural sounds. Perhaps, in some guages. And these, the muscles of the throat, which are em primary schools ployed to utter guttural sounds, became atrophied; ese systems at that in any case it had grown to be the 'fashion' of one class, wit not to pronounce throat sounds. Now the English he is asked to people still employed many throat-sounds; and the extremely difficult fEnglish or Saxon scribes wrote them down faithfully learn to recognifably, but quite simply. They wrote *light*, *might*, ateness from *tward* *night*—as *liht*, *miht*, *niht*; and the *h* had ation, mixed with more or less strong guttural sound. But the

Normans declined to pronounce this *h*; they either gularity and wa could not or would not. Then said the Saxon the vowels. Wcribes: 'Oh! you fine Norman gentlemen will not of representing sound our language as it is; you ignore our take a few of the gutturals; we will *make* you sound them.' So represented in ou they strengthened the *h* by putting a *g* in front of ; short *ȝ* by 12<sup>th</sup>; just as a farmer might strengthen a hedge by t *ȝ* by 11; long putting a strong wooden fence in front of it. But by 12. We, while the Normans respected the one no more than the g accustomed together; *gh* was in fact far more difficult to sound

these things, that we do not notice them; but the child has to notice them, and he suffers from them more or less—and generally more.

The digraphs, too, perplex and confuse the child. The oddest of them all is *gh*, which we use in the writing of seventy-five words. But in sixty-three of these we ignore the *gh* entirely; and in nine of

than simple *h*; and accordingly they now ignore both. But the *gh* remains—a moss-grown boulder from an ancient glacial period, when guttural were precious, and men still believed in the truth fulness of letters.

The work done by the letter *e* is perhaps the most remarkable instance in our language of union in one letter of real work with superfluous busybodiness. Like the learned counsel in Chaucer's *Prologue*:

And yit he seemëd busier than he was.

There is—

- (1) Its usual work before consonants, as in *wet* and *went*.
- (2) Its use to lengthen the preceding vowel, as in *mate*.
- (3) The doubling of itself to make its own long sound, as in *feed*.
- (4) Its combination with *a* for the same purpose, as in *meat*.
- (5) Its combination with *a* for the opposite purpose, as in *bread*.
- (6) Its coming after *i* to make a long sound, as in *pie*.
- (7) Its coming before *i* for the same purpose, as in *elder*.
- (8) Its combination with *i* for a quite different purpose, as in *piece*.
- (9) Its combination with *i* to make its own long sound, as in *receive*.
- (10) Its going before *w* to make a long *u* sound, as in *few*.
- (11) Its going after *u* for the same purpose, as in *due*.
- (12) Its going after *u* to make a quite different sound, as in *true*.
- (13) Its following *o* to make a long *o*, as in *foe*.

(14) Its preceding **o** for the very same purpose, as in **yeoman**.

(15) Its combination with **y** to make a long **a** sound, as in **they**.

(16) Its combination with **y** for no purpose at all, as in **money**.

(17) Its combination with **i** to make a long **a** sound, as in **veil**.

(18) Its combination with **i** to make its own short sound, as in **heifer**.

(19) Its appearance at the end of a word with no purpose at all, as in **couple**.

(20) Its combination with **d** with no purpose, as in **walked**.

**y** this time, the child can hardly be expected to know what an **e** is and what it is not.

The following are a few more of the

#### CONTRADICTIONS OF E.

Dream	{	Here it is <i>long</i> and also <i>short</i> .
Bread		
Pie	{	Here it lengthens and also shortens.
Brief		
Pie	{	Here it comes <i>after</i> and also <i>before</i> for the same purpose.
Eider		
Due	{	Here it has an effect on the <i>u</i> , and also no effect.
True		

Nothing can be more confusing and distressing the young learner, unless the fairy *Good Order*, admonished by the Teacher, comes in to assort these tangled threads and intertwined distractions.

It may be useful to sum up all the above statements in the form of a concise

BILL OF INDICTMENT  
AGAINST  
OUR ENGLISH NOTATION.

1. An Alphabet of 26 letters is set to do the work of 45 sounds.
2. In this Alphabet of 26 letters, there are not only 8 true and fixed quantities.
3. The remaining 18 have different values at different times and in different positions; and sometimes they have no value at all. In other words, they have a topographical value.
4. Some of these 18 letters do—in addition to their own ordinary work—the work of three or four others.
5. A Vowel may have from 20 to 30 functions in our English Notation; a Consonant may have two or three.
6. There are 104 ways of representing to the eye 13 vowel-sounds.
7. Six of these vowel-sounds appropriate themselves 75 ways of getting printed.
8. In the most purely English part of the language, the letters are more often misleading than not. In the word *cow* or *they*, for example, there is no single letter that gives any true knowledge or guidance to the child. That is, the letters

n up all the above purely English part of our composite speech  
ncise have a historical, but no present, value.

9. The monosyllables of the language contain all its different notations, and these with the maximum of inconsistency. In reading the monosyllables, the child can trust neither his eyes nor his ears.

If this notation—which is the dress of language—could be exhibited to the eye by the help of colours, it would be seen to be of the most piebald character. It would be not inaptly described by a sentence in one of Dickens's novels: 'As for the little fellow, his mother had him attired in a costume partly Scotch, partly Hungarian, mostly buttons,' and with a Louis Quatorze hat and scarlet feather.'

If we compare the notation of our English tongue with the notation of the German language, we shall find that—as in its words, so in its letters—German is an almost perfectly homogeneous language. One sound is permanently—and not provisionally represented by one symbol; one symbol is permanently translated by one sound; and the consequence is that the experience of the German child in learning to read is always self-consistent, and every effort he makes tells towards the desired result. The attitude of his mind is a single and easy one; every act of attention he makes tells towards the required total; he cannot

\* The buttons would represent the *es*.

go wrong if he pays any attention at all ; his eye and ear are always in accord and help each other. Far different is the condition of the poor English child. His attention to the letters will quite often mislead him as not ; in the purest English the less attention he pays to the letters the better and he is like a man in trade—he may often be working as hard to make bad debts as to make good ones. The contrast between the work of the German Teacher and of the English Teacher is just as great. The German Teacher's work is simple and straightforward ; while the work of the English Teacher is at least five times as difficult and the conquest of these difficulties requires keen skill, perpetual inventiveness, and untiring perseverance.

Now all this has come to pass simply from the account independent and highly individualised character of the Englishman. A local usage—a tradition custom would always override general convenience or a merely abstract consideration like logical consistency. Indeed, the confusion in our notation has parallels in almost every side of English life. And a has an extraordinary parallel in our Weights and Measures, which have been regulated—down to the date of the 1878 Session of Parliament—to the entirely by local custom. An imperial bushel of corn is estimated in Mark Lane at 63 lb. ; but it was—down to 1878—72 lb. at Wolverhampton and Stafford, 70 lb. at Liverpool, and 75 lb. in Chester. In short, there were, prior to the passing of the Weights and Measures Act, twelve Rom-

ion at all; his eye different kinds of bushels in use in the grain trade. help each other. This state of things gave rise to endless confusion. the poor Englishman might buy his wheat by one measure, sell letters will quite sit by another, and, last of all, demand to be paid the purest English for it by weight. These complications involved letters the better endless reckonings, and, by consequence, numerous —he may often be mistakes. They were a great hindrance to trade, debts as to making, and, no doubt, were now and then the cause of green the work serious losses. Another parallel is to be found in English Teacher's work the coinage of Austria. There is gold money; Teacher's work if there is silver money—some of it debased and the work of the deteriorated; and there is copper money; but, in times as difficult addition to these, there are four different kinds of difficulties require paper money in four different languages, and some less, and untiring it is debased to the extent of sixty per cent. It

is plain that, if one received payment of an simply from the account in six of these different kinds of money,ualised character there would be—over and above the calculation of ge—a traditional value of the things bought in a self-consistent neral convenience, arithmetic—another reckoning based upon the like logical comparative and temporary values of the different our notation has kinds of money. In such reckonings, a foreigner English life. And a child would be at a very great disadvantage. our Weights and Measures, just as an English bushel or an Austrian rulated—down town is continually changing in meaning and value, of Parliament—the symbols by which we attempt to carry imperial bushel onwards to the eye of a child are constantly chang- at 63 lb.; but it is in meaning and value; and the child's mind Wolverhampton proportionally confused and weakened. If we ol, and 75 lb. and in our arithmetic a traditional system of rior to the passivation made up of the fragments of the Greek, ures Act, twelve Roman, and the Arabic systems; if 479 were

written down as  $\Delta VII9$ ; and if, moreover, our coinage were so irregular that sixpence in Middlesex counted for eightpence in Surrey, but was only fourpence in Hertfordshire, then it would be for a very difficult, tedious, and expensive process almost to teach arithmetic in our public schools.

The difficulty that would be felt, and the expense that would be incurred, in teaching such an arithmetic as that I have indicated, are really felt at his expense incurred in the teaching of reading—in putting however into the minds of children an acquaintance with the bad habits of our notation. For the problem is not to make the child acquainted with the letters; it is really to make him acquainted with children and thoroughly practised in eccentric and self-inconsistent habits which the English have acquired in the course of time, of writing down the individual sounds of their mother-tongue. To master them all the combinations would require 158 separate acts of attention—each of which must be repeated until they are thoroughly mastered. Well; that can be done. But the difficulty is even greater than this. Of these 158 habits, some are inconsistent with and destructive of each other; and the experience of the child is not a regular process portioned addition and cumulation, but sometimes of subtraction and loss. Let me take an example. There are in the language 59 words in which the symbol *ou* sounds as in *house*, *noun*, &c.; and, of course, if the child meets with a large number of such words, he naturally and quite unconsciously draws the conclusion that *ou* will always have the scientific

and if, moreover, o sound. But, by and by, he lights upon words like *sixpence* in Middle English *your*, *four*, *would*, and *mould*; and now, not in Surrey, but weakly is his previous experience entirely upset, but more, then it would be forms a vague idea that to *ou* may be attached an expensive process almost any sound whatever. Now, if we attempted schools.

To give an arithmetical value to his experience, we felt, and the expense might say: He has met the first case of *ou* nine times; he has met the second case six times; and all, are really felt at his experience is therefore equal to three. This is, reading—in putting however, rather a favourable way of putting it. In acquaintance with the fact is, that, in our every-day procedure. For the problem with children, the exceptions make themselves acquainted with quite as important as the rule; and both Teacher and him acquainted with child, in a kind of silent intellectual despair,

158 eccentric give up the guidance of the rule altogether, and the English habit teach and learn each word separately, as an individual of writing down individual, and not as one of a class.

To master 1. The child at first expects to find a certain truth in 58 separate acts in these marks; but he quickly comes to feel that must be repeated until is no matter what sound you give to a sign—mastered. Well; that the sign itself has only a chance value: and, finally is even greater far as training is concerned, the Teacher soon finds, some are incorrect; discovers that his eye is never rightly or thoroughly each other; and educated until after the expenditure of a dispropo-a regular process portionate amount of time and money. He has sometimes of su-constantly to read off letters that are not there, take an example and to ignore letters that are there; he is con-words in which constantly coming upon new forms for the same sound, noun, &c.; and, new sounds for the same form, so that habit a large number is out of the question. So far as the mind of the quite unconscious child is concerned, unless the Teacher adopts a ill always have the scientific method, no wish for classification ever

arises in the child ; or it sets in late, if it ever sets in at all. His past experience is constantly putting him out—constantly tripping him up ; until at last he comes to feel that he need not rely on his own exertions, but must be constantly helped over the stones by the Teacher. Thus all teaching challenges reading becomes telling ; and these are just contrary to each other. And here is another loss: our evil notation tends to destroy good teaching.

To put all this in a few words: *The character of our Notation prevents the formation of habits*. How serious a matter this is in education, how serious an expense it is to the country, a little reflection will shew. The whole aim of Education is to form habits. Habits are formed by the same, the perpetual repetition of small acts of the mind or the soul of the body ; and the more often these acts are repeated, the more easy it is to perform them until at length they become a part of the spontaneous nature, and are performed with perfect ease and pleasure, and beneath consciousness. In other words, power has been produced ; and the exercise of power is always accompanied by path—the reflex of pleasure—stronger or weaker according to circumstances. But not only is power produced by the repetition of innumerable acts of attention, a method or path is beaten through the subject, and itself by this perpetual treading of the feet of values ; thought ; and the trained child can use the knowledge he has gained for the conquering of that to be unknown. He does not need to be told this and The

late, if it ever set that and the other thing; he knows himself how constantly putting to learn—he has a method; and he takes hold of him up; until at last every new appearance by the right handle. But did not rely on his these perpetual inconsistencies, these constantly helped over recurring self-contradictions, this interminable thus all teaching challenge to the child not simply to recognise so these are just common letters, but to ask himself what is their other. And here is value here and here—to ask himself whether he tends to destroy must not ignore and cut them altogether—prevent

the growth of habit, the production of power, the words: *The character formation of a path or method.* They almost formation of habit compel both Teacher and pupil to learn every in education, however as a separate and individual entity—just the country, a little he learns to know men and women. If, when the aim of Education the symbol varies and the sound remains the are formed by the same, the child cannot believe his eyes; and, when parts of the mind the sound varies and the symbol remains the same, often these acts who cannot believe his ears; and if the eyes and the to perform them are the two main avenues to knowledge, it part of the spon follows that we begin the mental education of med with perfect most of our children by demoralising and consciousness. If using these two all-important organs. We invite introduced; and the children to walk in what ought to be a plain accompanied by path—the smooth and delightful road to the city weaker according to knowledge; but this path is strewn with rough power produce historic boulders, which delay their goings and acts of attention weaken their intellectual limbs. For, as I have rough the subject, most of the letters have only geographical g of the feet values; and the young child's mind has to solve can use the knowle difficult practical problem of Sir Boyle Roche, conquering of thud to be 'in two places at once.'

be told this and The two sets of difficulties I have described so

interlace with and ramify into each other, as ~~and~~ entirely prevent the formation of habit. In fact they destroy mental habit. And habit, as has been said, is power; and these two difficulties really ~~base~~ therefore to paralyse all mental power in the child—so far as reading is concerned. The logical ~~conclusion~~ that our English children must learn each word as an individual is borne out by the fact that they do learn to read in this way. Every person I have spoken with—H.M. Inspectors, Teachers, Managers, and many others—have expressed to me their conviction that English children learn the words as separate and individual existences; and many of them go farther, and affirm that classification is useless, if not impossible. Thus, for the child, our language sinks nearly to the level of Chinese. The essence of European thinking ~~loose~~ classification; but, so far as the notation of the language is concerned, we are out of the European ~~and the~~ sphere. And it is this tedious and mindless process that costs the country so much: the improvement of our methods would result in an enormous ~~glass~~ cheapening of the process. This is a consideration which cannot be too earnestly pressed upon the attention of the Education Department, School Boards, and School Managers. In the schools I have visited in every part of the country, I have generally found both Teachers and children working ~~kept~~ with far too much strain against these difficulties, beating up against contrary winds, driven hither and thither by the cross currents and chopping sea of our different notations, and accumulating ~~sol~~ ventur

into each other, as ~~and~~ and trustworthy experience—at the expense of the on of habit. In fact country—in the slowest and most laborious pos- and habit, as has been able fashion. Just as twenty-five per cent. of difficulties really ~~lose~~ or depreciated coin thrown into the circula- cal power in the child~~tion~~ of the country would upset all commerce, and ed. The logical ~~turn~~ bargaining into barter or merely individual children must learn each ~~transactions~~, the twenty-five per cent. of anomalous e out by the fact that ~~station~~ (and this is a very moderate estimate) way. Every person turns almost all the mental effort of the child into Inspectors, Teachers, momentary shift—into a series of hand-to-mouth have expressed to ~~trans~~actions. In other words, the child cannot children learn ~~the~~ accumulate experience with ease or economy; he dual existences; and constantly meeting with new complications d affirm that class which his past experience will not unravel—in sible. Thus, for the fact, he works as if he had no past, or—what is arly to the level worse than no past—a past of broken habits and European thinking loose perceptions, behind him. No wonder that the notation of the lower classes find it difficult to learn to read; out of the European and that even the middle classes find it difficult to and mindless procedure to learn to spell.

: the improvement. There is a passage in *Alice through the Looking-glass* which describes, as if in a parable, the difficulties felt by most children in their attempts to master the reading of our mother-tongue.

In the schools off in front; and whenever it went on again (which it the country, I generally did rather suddenly), he fell off behind. Otherwise children working kept on pretty well, except that he had a habit of now ast these difficulties and then falling off sideways; and, as he generally did this finds, driven hith~~er~~ the side on which Alice was walking, she soon found it s and chopping seat. "I'm afraid you've not had much practice in riding," accumulating so~~he~~ ventured to say as she was helping him up from his fifth

tumble. The knight looked very much surprised and a little offended at the remark. "What makes you say that?" he asked, as he scrambled back into the saddle, keeping his hand in Alice's hair with one hand, to save himself from falling over on the other side.

"Because people don't fall off quite so often when they have had much practice."

"I've had plenty of practice," the knight said gravely; "plenty of practice!" Alice could think of nothing better to say than "Indeed!" but she said it as heartily as she could. They went on a little way in silence after this, the knight looking with his eyes shut, muttering to himself, and Alice watching him anxiously for the next tumble.

"The great art of riding," the knight suddenly began in a loud voice, waving his right arm as he spoke, "is to keep"— Here the sentence ended as suddenly as it had begun, as the knight fell heavily on the top of his helmet exactly in the path where Alice was walking. She was quite frightened this time, and said in an anxious tone, as she picked him up: "I hope no bones are broken?"

"None to speak of," the knight said, as if he didn't mind breaking two or three of them. "The great art of riding, I was saying, is—to keep your balance properly. Like that, you know"— He let go the bridle, and stretched both his arms to shew Alice what he meant, and this time he fell flat on his back, right under the horse's feet.

"Plenty of practice!" he went on repeating, all the time Alice was getting him on his feet again. "Plenty of practice!"

"It's too ridiculous!" cried Alice, losing all her patience this time. "You ought to have a wooden horse on wheels that you ought!" "Does that go smoothly?" the knight asked in a tone of great interest, clasping his arms round the horse's neck as he spoke, just in time to save him from tumbling off again. "Much more smoothly than a live horse," Alice said, with a little scream of laughter, spite of all she could do to prevent it. "I'll get one," the knight said, thoughtfully to himself. "One or two—several, and be

uch surprised and a lit-  
akes you say that?" The great art of riding is to keep your balance  
he saddle, keeping ho-  
ve himself from fallin-  
e so often when they  
e the same letter, and to keep your mental  
ance among all this confusion. Alice 'found it

the knight said grav-  
think of nothing bet-  
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e after this, the knight letters, but to be ready to give a new sound  
hself, and Alice watch-  
the old friends at discretion or indiscretion.

nd thus a want of firmness, confidence, and  
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y on the top of his head may in fact stick to the pupil all his life.  
was walking. She  
n an anxious tone, as  
re broken?"  
aid, as if he didn't m-  
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in time to save him  
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it. "I'll get one,"  
"One or two—sever-  
ould be a very slow and difficult thing to learn,

- 1 He has to notice when he must *not* notice (in the case of *silent letters*);
- He has to notice when he must alter his translation of a symbol—or be *false* to his past experience;
- He must notice when to give the old translation, or keep *true* to his past experience.

It is very difficult to make one set of movements the right hand, and a different set with the but if we had to keep up a third and still different set of movements with one of the feet, it

## 38 THE COMMONEST WORDS THE WORST SPELLED.

The language contains more than 1300 words, the notation of which is not in harmony with the pronunciation; and these 1300 words are the commonest—the most in daily use. Of these, 800 are monosyllables—and these too in most common use—words like *too*, *said*, *they*, *brought*, *one*, and *once*. The problem of teaching to read a true notation is to train children to co-ordinate with it the symbols which they do not yet know, the *ear-language* (the printed symbols which they have known from their earliest days). But what if the eye-language refuses to be fitted to the ear-language? What if they have lost sight of each other good-bye and taken separate paths? What if the task becomes for the child a mere arbitrary and entirely forceful linking of the one to the other?

The important question now arises: *Is there an antidote to this state of things?* The two diseases or malformations in the language are plain to every one; and they are perpetually present to the elementary teacher. What are we to do?

The analogy in human affairs points to the fact that the presence of a great defect in one direction points to the presence of a great power in another direction; and the question arises: Is there, in the enormous deficiencies and absurdities in the notation, some countervailing advantage in the language?

I believe there is an antidote—a very simple but a very effective one. The antidote is to

more than 1300 words not in harmony with the 1300 words are to my use. Of these, 800 too in most common use, brought, one, a thing to read a translation to co-ordinate with the printed symbol, the *ear-language*, in their earliest days refuses to be fitted if they have been taken separate paths for the child a mere linking of the words arises: *Is there*? The two diseases are plain and perpetually present. What are we to do? This points to the effect in one direction power in another arises: Is there, absurdities in advantage in a dote—a very simple antidote is to

found in the language itself. It is easy, by the invention of diacritical \* marks, to guide the child to the ordinary pronunciation; but then these diacritical marks are themselves a new notation. The cure is not to be found in that direction. The language is poor in letters; but it is rich in words. The wealth of the vocabulary may make up for the poverty of the alphabet. There is no more common experience in the writing of English than the quickness which the mind soon acquires in rejecting this phrase and preferring that—in substituting one word for another, in selecting, among a number of candidates, the aptest word for the purpose. There is probably no European language with so many different words for the same notion; and it is quite possible to write one's ideas in two perfectly different kinds of English—Latinised English or pure English. This then raises the hope—is it possible that, by conscious selection, we should come to write English which should present no difficulties to the learner, and which should be printed in a self-consistent notation?

I have made the small but important discovery that there is such a notation in the language, and that it is possible to write decent English in it. Among the detritus of notations which represent the English language upon paper, there exists a **PERFECT NOTARE**, which is always self-consistent, and in which sound and symbol are such marks, I mean, as are used to indicate silent letters, etc. etc.

always in agreement. This perfect notation represents the twenty-six letters of our alphabet in only one of their functions; and, if intelligently taught, it can be learned with pleasure in a very short time. Narrative of all kinds—Bible Stories Travels, Natural History, and even Verse—can be written in this perfect notation without much injury to the style and rhythm of the language.

If this is so, then it follows that the existence of this perfect notation at once puts into our hands the true method of teaching to read. Acquaintance with one self-consistent notation forms the primary condition \* of all methods and all attempts at teaching the paper-form of our language to young children.

A child who has mastered this has mastered it with all his faculties preserved to him, his rational and 'natural' expectations gratified, and his love for self-consistency and intellectual honesty contented.

It is best to proceed by way of examples. I have used this perfect notation in the composition of two Primers—introductory to the ENGLISH READERS published by Messrs W. & R. Chambers. (See pages 41 and 42.)

Now, in the first of these pages, the *g* in *fing* has two functions; and there ought indeed to be

\* I earnestly commend this to the consideration of my friends in the Education Department. The *First Standard* ought to be 'Ability to read in one notation.' This would set the Revised Code on a firm rock, so far as reading is concerned.

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FIRST PRIMER—PART I



Lesson 21.

a king and a ring; the  
king has a ring.

the ring is on his finger.  
I see the king.

the bird will sing a song  
to the king.

Lesson 22.

the bird sings on the tree.

sing, lit-tle bird, sing.

the king's dog ran at  
the fox.

ring the big bell.

king      ring      sing

## SECOND PRIMER—PART I.

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### Lesson 5.

1. This is a nail ;  
That is a pail.
2. Look at that snail ;  
He has a short tail.
3. Put the snail in the big pail.
4. Tell Tom to bring me a nail.
5. The sheep stand on the plain,  
A-mong the pelt-ing rain ;  
But they nev-er do com-plain.
6. Hark to the hail and the rain !  
A-gain and a-gain and a-gain  
It dash-es and smash-es,  
With a patt-er and a clatt-er,  
That will al-most shatt-er  
The wind-ow pane.

nail      pail      snail

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early



two gs. But I thought it better to allow a few inconsistencies to creep in, rather than allow the lessons to be dull. You cannot treat children as if they were squares and triangles; their emotions are the strongest power about them, and it is the province of the good Teacher to obtain early power over these. Again, in the page quoted from the Second Primer, the object is to make the child familiar with the symbol *ai*, which represents a long *ā*. But there is the word *pane*, which is quite inconsistent with *plain* and *rain*. Here again, however, it was thought a pity to sacrifice the rhyme to the demands of logic.

Let us take another example; and this time from verse. The following lines are written in a completely self-consistent notation; every letter has only one sound, and every sound is represented by only one letter:

Run, run, O little rill,  
Run and turn the dusty mill,  
Run, run, O little rill,  
Past the rocks, along the hill ;  
Ever running, never still,  
Run and turn the dusty mill.

I have also seen extracts from books of travels rewritten in this way; and the English was by no means flat or unpleasant—as it generally is in those wretched little books which are written in monosyllables.\*

In this perfect notation, each letter exercises

\* The odd thing is that the monosyllables of our language contain early all the difficulties and all the absurdities.

only one function; and a new function is not introduced until the first function has been thoroughly mastered. The purpose in using this regular notation, is to make the child fully acquainted with and complete master of one function of each letter; just as in teaching the arithmetic of money, the pure and self-consistent notions and usages are taught, before allowances for debasement of coinage or depreciation of paper are discussed. An able teacher, to whom I explained this plan, aptly named this perfect notation *an inner language*; and it is this inner language that should be taught first—it is this inner speech that the child should be first quite at home in.

If a child is kept at this perfect notation until he has fully mastered it, all his experience will have gone to the good—will have been always adding to itself—will have built up in him a set of habits which he can never lose. He learns one function of each letter at a time; and his experience never contradicts itself, but all his efforts and attention go towards the total result. He is put on a kind of railway; and his power and work are not lost in mere friction. He may then go on to those examples of printing which are less common and more exceptional. There will always be a residuum of words which refuse to fall into a class; and these must therefore be learned as individuals. If, however, habits have been formed and mental power created, this will be an easy matter.

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Before going on to the discussion of the second part of the problem—that which relates to the growing mind of the child, it may be as well to sum up the conclusions at which we have arrived:

1. In the most purely English part of our language, the letters do not *guide*—they *mislead*.
2. The *notation* belongs to the fourteenth or to some previous century; the *pronunciation* is the pronunciation of the nineteenth.
3. The language is overrun with letters which have a *philological*—but no *practical*—value.
4. The *names* of the letters have little relation to their nature. It is no aid, in examining the word *they*, to say *tea-atch-ee-wy*.
5. A vowel may have more than twenty functions in our language; a consonant may have two or three.
6. Our present notation is made up of disagreeing fragments of several notations.
7. The *actual*—as well as the *logical*—result is, that children learn each word separately, like a Chinese character.
8. This is the most *expensive* and *tedious* way of learning—the most wasteful in *time* and in *money*.
9. Among the detritus of notations which represent the English language on paper, there lies embedded a **PERFECT NOTATION**, which is always self-consistent, in which symbol and sound are always in agreement with each other.

10. This notation presents the twenty-six letters in only one function at one time.

11. It can be learned in a very short time.

12. Narrative of all kinds can be written in it, with little injury to the style and habits of the language.

13. As a question of economy of time and money, children ought to learn this perfect notation—this inner language—first.

14. The difficulty of a word depends on two things—and only two:

(a) The simplicity or regularity of its formation—its truth to the mind; and (b) The interest a child takes in the object which the word represents—its power of exciting the feelings.

But only the half of our task has been performed. We have found out this perfect notation; let us suppose we have engineered the language, and provided the gentlest gradients for the going up of the children. Now comes the question: How are we to induce the child to learn this perfect notation? What are the powers, organs, faculties, desires, appetites, or tentacles existing in the child which the Teacher is to employ in order to make him take a firm hold of this knowledge? For, as the cook must have Nature with him, and as the physician must have Nature with him, so must the Teacher have Nature with him also. I am not here dealing with the old fiddle-faddle

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question whether knowledge ought to be made interesting or entertaining to children. Children themselves despise the very raising of such a question ; they are perfectly serious ; they always want to get to business, and like to believe they are doing something useful. What I mean is that the Teacher must get his pupils honestly interested in what he is doing ; otherwise much of his work will be waste. And I think it self-evident that the more of the powers of a child that are engaged in a subject, the better ; and that he is the best Teacher who enlists most.

Nay, one might go farther and boldly lay it down as an axiom in education : That it is advisable to have THE WHOLE CHILD engaged in what he is doing. Body and mind ; soul, common-sense, imagination ; eyes, ears, and hands ; love of the new and of the old ; feeling for the beautiful and for the odd—every power we can think of or discover must be enlisted by the Teacher. The teacher wants the whole child.

We want the body, for a child's limbs are always in motion, and we wish to get this motion utilised in the new acquisition ; and we want the mind for purposes of contrast, of comparison, of putting up the old in the new, of recognising the new element in what is old. Then we must have the child's soul on our side ; his better and kindlier feelings must be appealed to even in learning to read. His common-sense, too, which a child is pure and clear, and has not been corrupted by too much experience of the follies

and inconsistencies of his elders, is a most valuable power in the hands of the Teacher. The common-sense of the child will always—either consciously or unconsciously—tell him that there are things worth reading, and things not worth reading, and that it is better to learn to read by reading those things that *are* worth. His common-sense will lead him to reject such sentences as the following, for example :

He had a gad.

The lad at the cab is mad.

Dad, the lad, and Mab, the pad.

Is Dad a bad lad ? Tab is sad.

Sentences like these may seem to be good practice on the short sound of *a*; but the child probably asks himself in a silent but sufficient manner: ' Is it then to read things like this that we learn to read ? ' Every experienced Teacher knows that you can do one thing best by doing more than one; and that you cannot fix the whole soul and mind of a child upon the short sound of *a*. In fact, the problem of school-instruction is to secure for the time being, the maximum both of mental and of bodily activity.

I now proceed to describe the Method which I follow in teaching to read; and the plans which are required in carrying out the method. The key-note to the method is simply this: I present to the child a few words in a self-consistent

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notation; and, by presenting the true elements or factors of these given words in as many different combinations as possible, I induce the child to make or to recognise as many previously unseen words as he can. The memory is furnished with a small stock-in-trade; and then the judgment is invited to play freely upon them. A perpetual movement of mind is kept up; and the eye, the ear, and the hand are also kept constantly at work.

The following are the chief parts of the PLAN on which I work, and by which I apply the method:

1. PRODUCTION of WORDS on the Black-board by the Teacher.
2. RECOGNITION of these WORDS in various orders by the children.
3. CONTRIBUTIONS by the children.
4. Recognition of Words (previously known) in the SHEETS.
5. Reproduction on the WORD-MAKER by the children.
6. Recognition of Words and Sentences previously learned in the FIRST PRIMER.
7. Black-board Drill by means of COMPARISON and CONTRAST.

It will be seen that the essence of the above plan is the constant connection of RECOGNITION and REPRODUCTION. Never let a child receive into his mind a new element without setting the mind at once to play upon it, and—when it is

possible, as it generally is—to add a new element to it. Look! and then Say! Remember and Reproduce! The two mental acts strengthen each other; and there is always a danger of the first power decaying and of its results being lost, if the second is not called in to its aid.

I will now say a few words upon each of these steps. If (1) in the First Step—which is that of PRODUCTION—the Teacher is able to draw, he will have an enormous advantage. For he will be able at once to enlist the curiosity, and all along to keep the interest of the children. However rough and clumsy his drawing may be, children have an inexhaustible interest in the pictures of things they know. A drawing of a cat or a dog or a cow gives the Teacher an opportunity of appealing at once to the common-sense of the children, and of saying: ‘Now, this is a picture of a dog; but *this* is the way we print the word *dog*. This is how the *dog himself* looks; but *this* is how the *word* looks.’ Having introduced the word *dog*, he proceeds to build upon it a set of words: *dog, log, frog*. Then he may give his class *cat*—picture and word, and build a set of new words upon that: *cat, bat, fat, rat, mat, sat, pat*, and so on. He then proceeds to print phrases and sentences upon the black-board—phrases and sentences consisting of combinations of words already given—*The cat on the mat, The rat in a hat, The cat sees the rat, The rat sees the cat*, and many more. He will not give a new phrase or sentence until the class—the whole class—every individual in the

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class has mastered every word in the sentence. It is necessary to define the word *master*; as, if it were left in the vague, it might introduce fallacies of thoughts and imperfections of practice. By mastery I mean four things: (1) The children must be able to read the sentence which has been printed on the black-board, straight on; (2) they must be able to read the words backwards; (3) they must be able to point out any word asked for; and (4) they must be able to name any word pointed to. No new list of words ought to be introduced to the class until they have mastered the old list and the sentences based upon them. The following lists may be found useful by the young Teacher; and he can easily add to them himself: *Ox, box, fox* list; *sun, bun, run, fun*; *big, pig, gig*; *fish, dish*; *hen, pen, ten, een*; *mill, rill, fill, kill*; *ball, fall, tall, wal'* and *cow, bow, bow-wow, row, sow* list. The Teacher should keep these lists on separate pieces of paper for his own guidance.\* If the Teacher has been faithful in the giving and teaching of these lists, he will have himself discovered three important educational principles:

- (a) Children like to see a thing grow up before them. The ready-made does not excite their feelings.
- (b) There should be a living connection between every element from the first. This living connection is given by the making of sentences.

\* For a collection of these lists, see Appendix (A).

(c) A child should never be *told* the function of a letter which is presented under new circumstances; he should work it out for himself.

2. The Second Step is the RECOGNITION of the printed words in various orders by the children. This has been already discussed under the first head. But the young Teacher, if he notices the mental phenomena which appear in his class, will soon find that it is easier for the children to point to a word which has been spoken aloud, than to give the name of a word which is pointed out to them. The reason of this is not far to seek. It is this: The feelings and pleasant memories of the children have been aroused and excited by hearing the word *cow* or *dog* spoken aloud, which calls up a delightful image, and at once sets the mind in motion; whereas, when the word *cow* or *dog* merely is mutely pointed out to them, they see only a few black marks, and they have to work their way back—*without the impulse of any pleasurable excitement*—through their previous experience of these black marks.

This Recognition consists of three different and distinct momenta :

- (i) Find me.....
- (ii) Make me..... (This will be done by the *Word-maker*, explained and described farther on.)
- (iii) What is this word ?

There is an important distinction in the nature of the words we use, which it is necessary that the

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young Teacher should keep always steadily before him. Some words are the symbols for things and thoughts; while some words are merely the symbols of acts of mental connection. Some words present to us actual *existences*; while another set presents us with *relations* solely. Professor Earle designates these two classes as *presentive* and *symbolic*; but perhaps a simpler way of naming them would be to call them *real* and *relational*. Thus *house*, *field*, *sea*, and *horse* are real words; while *but*, *which*, *since*, and *if* are merely relational. When the first class is presented to the mind of a child, his memory and imagination are at once stimulated; the ship of his mind, so to speak, gets under weigh; and hence the Teacher has not to push or draw, but only to guide. And, the more way the ship has on, the easier is it to steer. But the second class calls up no mental image—stirs no mental emotion whatever; the mind remains in a state of suspense when it contemplates them. This class of words excites mental activity only when they come into use by joining together two poles, each represented by a word which is *real*; and they therefore represent merely the act of joining which the mind performs when it brings the two real notions together. Such words ought accordingly never to be presented to children except along with words in which they have a living interest; and they will be found to learn the relational words only for the sake of the others. If, therefore, the young Teacher finds that his little pupils are slow at recognising words like *which*, *when*, *whence*, and

so on, he must not be surprised or discouraged. It was quite certain and necessary that these would be the last learned; and they will not be thoroughly known until the others have been seized and firmly held. See Appendix (C).

3. The Third Step should consist of CONTRIBUTIONS to be made by the children. Every good Teacher knows that the mental attitude of mere passivity or receptivity is a totally insufficient one; that the child will not even be able to be receptive unless he is a great deal more; and that he will not be able to hold fast what he has got unless his own powers have previously acted upon it. When, therefore, the Teacher has on the black-board a word like *ball*, he will ask his class for other words that end in *all*; and he will get from them in more or less speedy contribution the words *call, fall, tall, squall, small*; and he will print each word as he gets it.

4. The Fourth Step is RECOGNITION IN THE SHEETS. This is hardly worth promoting to the dignity of a separate step. But it involves this new effort on the part of the child—that he has to recognise his old friends in a new dress under quite different circumstances. For, whereas he was in the habit of seeing his words and sentences printed in white upon a black ground, he now sees them printed in black upon a white ground; and this difficulty he has to get over for himself, while he has to accustom himself to these altered conditions. Nay more, the shape of the letters is probably different. The Teacher will most

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probably not have employed the Clarendon type which is given in the sheets.\* The same kind of practice as in the First Step should be given here. Reading straight on; reading backwards; pointing out words; naming words pointed out; going down with this pointing out; going up; jumping here and there—all these plans should be resorted to, so as to prevent dulness ever coming near the class. And, if this is faithfully done, another educational principle will evolve itself to the consciousness of the Teacher:

Good Teaching consists of REPETITION—which is *infinite*, but never ~~monotonous~~.

How many questions can I ask upon a small and limited given surface? How many changes can I ring? How many different kinds of permutations and combinations can I make? These are the questions which a faithful young Teacher is perpetually asking himself.

5. The Fifth Step consists of REPRODUCTION BY THE CHILD on the WORD-MAKER. A drawing of this small apparatus is given in the following page. The *Word-maker* consists of three wheels of cardboard—one on the left, one on the right, and one in the middle. The wheel on the left contains initial consonants; that on the right, final consonants; and the middle wheel contains the vowel sounds.†

\* Which accompany Chambers's *English Readers*.

† Some eight years ago, I invented a Word-maker on the same principle; but the model was both clumsy and expensive. In the present one, I am indebted for some excellent suggestions to the French *Syllabateur Archambault*, whose rights I have reserved.

If the child is at work on an *at* list, he brings the vowel *a* within the space left by the black band in the middle; he brings the *t* opposite the *a*; and now he has *at*, and is ready to begin. The Teacher, who is working with the large Word-maker, turns the wheel on the left until *b* comes opposite *at*, and asks the class to make *bat*. Then he calls upon them to make *cat*, *rat*, and so on. It would



be better if the children could print the word upon their slates. But this very few children can do; and, as it is well to enlist the labour of the hand from the very first in learning to read—as it is well that he should *do something for himself*—as it is well that the Teacher should never act *for him*, but that he should always act *with the*

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Teacher, the use of the Word-maker probably gives the initial step in action which is wanted for young children.

A very useful drill—one which would interest the children, and also provide a good outlet for their bodily activity—would be *printing in the air*. The Teacher could easily train his little class to make motions with the arms as if they were printing the letters on the black-board—always, however, employing the simplest forms of the letters. Thus it would be better to take the form *a* rather than that used ordinarily in typography—a. This gymnastic printing would be a change and a relief; and it would also knit the class together in a closer corporate life.

6. The Sixth Step is RECOGNITION IN A BOOK. Let us suppose that the child has mastered all the words contained in the sheets. He finds the same words under new circumstances in the first seventeen pages of the FIRST PRIMER. The honour of having a book put into his hands—the feeling of property and possession, marks a new epoch in his school-life. It is of the highest importance to economise these sensations with children; and above all, never to anticipate. Honours should not be thrust upon them; the children should grow up to them; the honours should come naturally to the children. ‘It would be a great triumph in teaching,’ says Dr Abbott, ‘never to give a definition until it is wanted.’ But this statement may be extended over the whole of education; and it may be said with truth that

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58 SEVENTH STEP: COMPARISON AND CONTRAST.

the success of all educational work consists in giving everything at the right time, and in close and compact growth.—But the children will read these seventeen pages with perfect ease. So they will, and that is just the point. One main purpose in the mind of every good teacher is to create in the minds of his pupils a consciousness, nay even a sensation, of power. Failure, confusion, muddle-headedness, lead nowhither; they have no result. Put the children in good humour with themselves; make them fond of what they are doing; and the battle is won. Their progress after that is a perpetual pleasure.

7. The Seventh Step consists of DRILL on the black-board by the aid of COMPARISON and CONTRAST. This is done by placing on the black-board double sets of words, which have one similar element in common, and another element in which they differ. The Contrasts are necessarily of three kinds. The words compared being monosyllables of regular notation, they will differ from each other (a) in their vowel-sounds, or (b) in initial consonants, or (c) in their final consonants. The Teacher has, accordingly, large opportunities of varying the lessons and the questioning upon them by placing on the black-board sets of words somewhat like the following:

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hit              hat

pit              pat —and so on.

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will of course be printed in columns, so that the first letters may be thrown into prominence, and the children will plainly see what is the common element in such sets as *it, bit, hit, sit, pit*, and so on. The practice in varying final consonants is just as easy, and may be made just as interesting. They are such as these—but displayed in columns—*bit, big; pit, pig; bat, bag, &c.* The practice should be entirely limited to words, and should never embrace unmeaning syllables. The introduction of unmeaning syllables is a breach of two sound educational principles—namely:

(a) The mind cannot be moved unless the emotions have been first touched through the senses. No emotion can be excited by the exhibition of such syllables as *com, re, per*. But such words as *pig, big, mouse, house*, at once wake up the powers.

(b) An analysis is of value only for a synthesis that is to come after it. Accordingly, every act of analysis ought to be made by the child himself under the guidance of the Teacher; and, in the case of words, it is useful solely to limit his attention to one part of a word at a time.

It may be said that this SEVENTH STEP ought not to come last, but should indeed accompany all the others. I quite agree with this remark. The good Teacher will not necessarily keep to the order I have set down, but will—for the sake of perpetual freshness and variety—introduce the different steps when and where he pleases. Only it is quite necessary that he should have a good

business plan and not straggle; and it is also necessary that the children should be put through all the mental exercises I have tried to describe. The English Teacher must not forget that the task before him is very much harder than that which the German Teacher has to perform; his task is to make his pupils familiar with and able to handle over one hundred and fifty different and self-contradictory symbols. This is a very difficult task, but it is an extremely interesting one; and the Teacher has infinite scope within it for the exercise of skill, ingenuity, and invention.

The old 'alphabetic method'—as it is called, though it had never had the smallest claim to the title of *method*—will not help him. It will hinder him and confuse the otherwise clear minds of the little children. It is anything but a help to a child to make him say *tea*—*aitch*—*oh*—*you*—*gee*—*aitch*—*tea*, *thought*; or to tell him that *doubleyou*—*aitch*—*aye*—*see*—*aitch* makes *which*. These statements are utterly erroneous; they have always been so; and they will always remain so. To teach the alphabet so that the child shall *know* the alphabet is also a quite impossible task; and much time is still wasted over it—not to mention the amount of unhappiness caused by this rough and thoughtless process. For what is teaching the alphabet? It is marrying twenty-six meaningless sounds to twenty-six meaningless and dead symbols—a process in which there is neither mind nor emotion nor interest—a process which is accomplished and which must be accomplished by sheer

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effort of the will-memory. And after it has been all done—at terrible cost and with terrible friction and waste—it is useless. The child is no nearer recognising a word than he was before. But, if he is started with a *practical alphabet*—that is, with ten or twelve words of simple construction; and, if other words are built up upon these, he has a hold upon words from the very first, and his knowledge and power go on steadily increasing without halt or break. There are three unanswerable arguments against the teaching of the alphabet—and with these I dismiss a part of a subject that might well bear further discussion:

- (i) In 'learning' the alphabet, the child merely attaches meaningless sounds to meaningless symbols.
- (ii) He gives historical names to symbols which are no guide to their functions or powers. *Aitch*, *doubleyou*, and *gee* (in all purely English words) are the best examples of this.

- (iii) The sum-total of the addition is often smaller than one of the factors in the addition. Thus we say *see* + *oh* + *doubleyou* = *cow*. But the whole word *cow* is much smaller than the one letter *doubleyou*.

Thus, for the worst notation in Europe, the worst method has been called in aid. To clear up confusion and disorder, falsity and error have been summoned; and this is not the least disaster in the present state of our primary instruction. It is as if a man who is in debt were to put his affairs in the hands of a money-lending office; the

'liquidation' would be rapid, satisfactory, and complete. When the child meets with *which* and does not know it, he is still—in some schools—requested to say *doubleyouaitchayeseaitch*. This is considered in the light of an introduction to the knowledge of the simple sound *which*. It is evident that there exists no connection whatever between the two—no bridge by which you can cross from the one to the other; and that the list of names of the letters which the child repeats is to him an abracadabra and an obstacle. And yet the money of the country is paid in many places for this mystic and irrelevant process.

Some of these objections argue against the Phonic System also. But the Phonic System aims throughout at being true, and at keeping faith with the child at every point. The educational objection to it is that it introduces the child to an analysis—into letters—in which it can have no interest, before it has laid in a stock of words on which it can perform the analysis. Nature everywhere presents us with totals; and we should, in the beginning of teaching, imitate this procedure of nature. Analysis will come at its own right time; it will come after the child has been practised in the drill for COMPARISON and CONTRAST, when the different letters, and the difference of the letters will be thrown up into consciousness, and the child will demand the names of the letters, because he will feel the need of them when he is obliged to talk about them.

If we make inquiries in the Schools of the

ctory, and com-  
which and does  
ools—requested

This is con-  
duction to the  
which. It is  
tion whatever  
which you can  
d that the list  
child repeats is  
cile. And yet  
in many places

against the  
System aims  
keeping faith  
the educational  
the child to an  
can have no  
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ools of the

country, we shall find that the LOOK-AND-SAY System is the one most in vogue, and most trusted by Teachers for obtaining the desired results. Teachers have instinctively found that it is worse than useless to attempt a rational account of the lawlessness which infests our Notation ; and they have felt that it is intellectually false to offer to a child as an exhaustive analysis or a true account —the list of names *see—oh—doubleyou*, for the word *cow*. But, without a previous thorough engineering of the language—without having so arranged it that a common-sense classification shall be suggested to and almost forced upon the child—the Look-and-Say system is really only a method of despair. Instead of being a 'counsel of perfection' such as we ought always to aim at in the case of children, it is only a rough and ready rule of thumb. It introduces each individual child to each individual word ; and it hopes that the child will, by the steady use of his eyes, get to know the *look* of the word and to attach to and associate with, by mere arbitrary habit, the *sound* which is considered to be the usual property of that word. But, if it has been preceded by a careful classification of words, if words have been employed to create the consciousness and the knowledge of letters, if such collections of words have been made as will compel the child to make up his mind as to the usual function of each letter, and, if a regular system is followed of introducing only one letter at a time (always in connection with some *word* previously known), then it may

be safely said that the Look-and-Say system is not only a system which can hold its own with others, but is *the* one system that ought to be employed in connection with a notation such as ours is, and in obedience to the truest educational principles. It alone is the system which gains, from the very beginning, the aid of a spontaneous movement of the mind and the feelings; and it alone keeps faith and truth from the very first with the child—and throughout his task. But this system must dissociate itself from its old bad habit of *telling* instead of *asking*; and it must learn and put in practice every device that can assist the Teacher—classification, comparison, contrast; rhyming, pointing-out, and sentence-making.

---

It may be asked—and fairly asked—why I have made so much and said so much about a small thing like teaching to read—about a piece of work that is generally put into the hands of the youngest and most inexperienced Teacher. The reply is not far to seek. If teaching is ever to be a profession at all, it must spare no labour to dig down to solid foundations—it must think no time or thought wasted which shall reveal the true and whole nature of the subject taught, and which shall also guide us to a knowledge of the nature of the child that is to be taught. These are the two problems that must be worked out with unswerving faithfulness and unwearying patience. The rule of

thumb, the living from hand to mouth, must be banished from the field of education. A similar reform took place about thirty years ago, in the art of navigation; and the corresponding change is, I believe, not far off in the sphere of school-instruction. The change in navigation was this: Captain M. F. Maury discovered that the nearest way to a place by sea was the farthest way round; in other words, that you reached your destination most quickly by sailing to it on the largest circle you could describe upon the globe. By taking such a course you had the advantage of all the help—of the maximum help that winds and currents could give you; and this scientific forecast—this trust in the large powers of nature, was amply justified by results. In the same way, it will be found that great-circle-sailing in education is—though it looks the longest—really the shortest and most effective road to our goal; and that, by following this route, we shall have the largest help from the emotions, the mental powers, and the whole life of the child.

The economic side of this question is also of the highest importance. Dr Gladstone, with great moderation, calculates that the loss from friction, due to our eccentric notation, amounts to '1200 hours in a lifetime,' and that 'more than half a million of money per annum for England and Wales alone' is wasted on training our children to habits in that which has itself no habits.

No one would wish to perpetuate the present confused system—or no-system—of notation which

66 THE NETTLE DANGER; THE FLOWER SAFETY.

we at present possess, if a practicable way of reforming it presented itself. But it is not so unmitigated an evil as at first sight it seems to be. If it gives to the Teacher increased opportunities and more openings for skill in teaching; if it gives him chances for exercising his powers of classification, of induction, of comparison and contrast; if it gives the children chances of asking themselves questions, of hunting and of finding—then it may in some respects be considered as a blessing in disguise. The oyster is wounded; and it mends its shell with pearl. A difficulty is often our best friend; it hides riches that we must dig for; it is a quarry of untold wealth. The faithful Teacher, in teaching our extraordinary and eccentric notation, will at the same time learn much for himself; he will learn the art of teaching; and he will learn that that art, like every other true art, has an atmosphere of buoyancy and joy which is the perpetual accompaniment of skill, resource, and earnest device. Nay more, besides the joy that comes from the faithful handling of his subject, there is the perpetual joy that comes from sympathy with young children; the Teacher has found the bath of everlasting youth, he suns himself in the light of happy faces and tearless eyes.

R SAFETY.

ple-way of  
is not so  
seems to be.  
opportunities  
if it gives  
classification  
contrast; if  
themselves  
en it may  
lessing in  
it mends  
n our best  
for; it is  
Teacher,  
ric nota-  
himself;  
he will  
art, has  
h is the  
rce, and  
joy that  
subject,  
m sym-  
as found  
nself in

## A P P E N D I X.

(A)

### LIST OF WORDS FOR BLACK-BOARD.

(Others may be had from any good Rhyming Dictionary.)

AT List.	lad	OX List.	IG and AG List.
bat	mad	ox	big, bag
cat	pad	box	fig, fag
fat	sad	fox	jig, jag
hat			rig, rag
mat			
ID List.		IX List.	OG List.
pat	bid	fix	bog
rat	did	mix	dog
sat	hid	six	fog
tat	kid		hog
vat	lid		jog
mid			
AM List.	rid	AG List.	EG List.
jam		bag	beg
ram		fag	leg
sam	'TIT for TAT'	hag	peg
IT List.	List.	jag	egg
bit	bit, bat	lag	
fit	fit, fat	nag	IG and OG List.
hit	hit, hat	rag	big, bog
lit	pit, pat	tag	dig, dog
pit	sit, sat		fig, fog
sit	tit, tat		jig, jog
tit	ID and AD List.	IG List.	OCK and OG List.
AD List.	bid, bad	big	dock, dog
bad	did, dad	dig	hock, hog
dad	hid, had	fig	lock, log
had	lid, lad	jig	mock
	mid, mad	pig	rock
		rig	sock

## APPENDIX.

ALL List.	AR List.	IND and AND List.	INK List.
all	bar		ink
ball	far	bind, band	brink
call	jar	hind, hand	link
fall	tar		clink
hall		ASK List.	
pall		ask	pink
tall	ACK and AKE List.	bask	drink
stall	back, bake	cask	sink
squall	lack, lake	mask	slink
	quack, quake	task	shrink
ELL List.	rack, rake	flask	
bell	slack, slake	ASK and USK List.	INK and ANK List.
cell	tack, take	bask, busk	link, lank
dell		mask, musk	sink, sank
fell	AND List.	task, tusk	drink, drank
tell	band	UST List.	think, thank
	hand	bust	olink, clank
ALL and ELL List.	land	crust	shrink, shrank
ball, bell	sand	dust	
fall, fell	stand	duster	ING List.
tall, tell	wand	gust	ding
		must	sing
ULL List.	END List.	rust	sling
dull	end	USK and UST List.	king
gull	bend	busk, bust	ring
hull	lend	dusk, dust	wing
mull	mend	musk, must	thing
ALL and ULL List.	rend	ANK List.	cling
all, ill	send	bank	sting
ball, bill	spend	blank	string
fall, fill	IND List.	clank	spring
hall, hill	bind	orank	ONG List.
tall, till	blind	frank	dong
	find	prank	long
UR List.	hind	sank	song
burr	kind	tank	thong
purr	mind		strong
fur	behind		along
	wind		

## APPENDIX.

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## INK List.

ink  
brink  
link  
clink  
pink  
drink  
sink  
slink  
shrink

## K and ANK List.

nk, lank  
nk, sank  
rlink, drank  
aink, thank  
ink, clank  
rlink, shrank

## NG List.

ding  
sing  
sling  
king  
ring  
wing  
thing  
cling  
sting  
string  
spring

## G List.

long  
ong  
ong  
hong  
trong  
long

## ING and ONG List.

ding, dong  
sing, song  
thing, thong  
string, strong

## ING and UNG List.

sing, sung  
sling, slung  
ring, rung  
cling, elung  
sting, stung  
string, strung  
spring, sprung

## UNG and UNCH List.

bung, bunch  
lung, lunch  
hung, hunch

## ING and INCH List.

cling, clinch  
fling, flinch  
ping, pinch

## UMP List.

bump  
jump  
lump  
clump  
pump  
plump  
stump  
mumps  
trumpet

## AMP List.

camp  
damp  
lamp  
cramp  
stamp  
tramp

## ART List.

art  
cart  
dart  
hart  
tart  
smart  
start

## ARD List.

bard  
card  
hard  
lard  
yard

## ARK List.

ark  
bark  
dark  
hark  
lark  
mark

## ARCH List.

market  
park  
shark  
spark  
old  
bold  
cold  
hold  
sold  
told  
wold  
starch

## ARK and ARCH List.

ark, arch  
lark, larch.  
mark, march  
park, parch

## ARN List.

barn  
darn  
yarn  
tarn  
born  
corn

## ORN List.

horn  
morn  
torn  
worn  
thorn

## ARM List.

arm  
farm  
harm  
alarm  
charm

## OLD List.

old  
bold  
cold  
fold  
gold  
hold  
sold  
told  
wold  
scold

## ATE List.

gate  
hate  
late  
mate  
grate  
plate  
slate

## ITE List.

bite  
kite  
mite  
white  
spite

## ADE List.

fade  
made  
wade  
shade  
blade

## OPE List.

hope  
mope  
rope  
gropes  
scope  
slope

## APE List.

ape  
cape  
gape  
tape  
grape  
scrape

## APPENDIX.

**APE and AME  
List.**

cape, came  
gape, game  
tape, tame  
lame  
flame  
same  
name

**IFE List.**

life  
fife  
wife  
knife  
strife  
rifle  
trifle

need  
reed  
seed  
bleed  
breed  
greed

**EER List.**

beer  
deer  
queer  
cheer

**EEZE List.**

breeze  
sneeze  
squeeze  
freeze

**ANE List.**

cane  
lane  
mane  
pane  
vane  
crane

**ACE List.**

ace  
brace  
dace  
face  
lace  
mace  
pace  
space  
race  
trace

**EEK List.**

leek  
seek  
week  
cheek  
creek  
eel  
feel  
heel  
kneel  
steel

**EET List.**

beet  
feet  
meet  
sheet  
sleet  
sweet

**INE List.**

dine  
fine  
kine  
line  
mine  
vine  
wine  
pine  
nine  
brine

**ACE and ICE  
List.**

ace, ice  
dace, dice  
mace, mice  
space, spice  
race, rice  
trace, trice

**EEN List.**

been  
seen  
queen  
green  
screen  
fourteen  
fifteen  
sixteen

**EAK List.**

beak  
leak  
peak  
squeak  
sneak  
speak  
streak

**ALE List.**

ale  
dale  
gale  
hale  
male  
pale  
sale  
tale  
stale

**EE List.**

bee  
see  
flee  
free  
knee  
tree  
three

**EEP List.**

deep  
keep  
steep  
sheep  
sleep  
weep  
sweep  
creep

**EAM List.**

beam  
seam  
steam  
cream  
scream  
dream  
stream

**EAP List.**

heap  
leap  
reap  
cheap

EAR

ear  
dear  
fea  
he  
ne  
rea

EAT

eat  
bea  
hea  
mea  
nea  
seat  
whi  
che  
blea  
treas

EACH

each  
bead  
pead  
reac  
teac  
blea  
brea  
prea

EAD I

dead  
head  
lead  
tread  
brea  
sprea

## APPENDIX.

71

ER List.
beer
deer
queer
cheer
EZE List.
breeze
neeze
squeezee
reeze
F List.
heet
et
eet
heet
eet
weet
List.
ak
ak
ak
neak
ak
ak
each
ak
ak
List.
m
n
m
m
am
m
m
ist.

EAR List.	EATHER List.	OOK List.	OW List.
ear	feather	book	bow
dear	leather	cook	wow
fear	weather	hook	cow
hear	heather	look	how
near		nook	row
rear		rook	bow
	EW List.	took	brow
tear	ewe	brook	brouse
spear	dew	crook	flower
EAT List.	few	OOL List.	OWN List.
eat	new	cool	down
beat	pew	pool	town
heat	yew	fool	gown
meat	blew	stool	brown
neat	brw	school	crown
seat	crew		frown
wheat	screw		clown
cheat	drew	OON List.	
bleat	grew	moon	OW (= o) List.
treat	flew	noon	owe
	mew	soon	bow
	chew	spoon	low
EACH List.	stew	balloon	mow
each			sow
beach			tow
peach	OE List.	OOP List.	show
reach	doe	hoop	blow
teach	hoe	loop	flow
bleach	roe	droop	slow
breach	toe	troop	glow
preach	sloe	swoop	crow
	fee		grow
	shoe!	OOT List.	snow
	canoe!	boot	know
EAD List.		coot	throw
dead		foot	fellow
head		hoot	yellow
lead	OO List.	root	follow
tread	coo	soot	hollow
bread	too	shoot	
spread	halloo!		

## APPENDIX.

AWL List.	OI List.	brain	house
awl	oil	gain	mouse
bawl	boil	grain	grouse
crawl	soil	again	out
shawl	toil	chain	about
	broil	stain	pout
	join	train	spout
dawn	joiner	strain	sprout
lawn	hoist	maid	shout
fawn	joist	paid	snout
	moist	laid	trout
		said	mouth
			south
foal	destroy	bay	loud
shoal	AI List.	day	cloud
foam	ail	gay	aloud
roam	fail	hay	
gloom	hail	lay	
boar	jail	play	OU (=oo) List.
roar	mail	May	soup
soar	nail	pay	group
boat	snail	say	would
coat	quail	way	could
goat	rail	ray	should
float	sail	bray	IGH List.
afloat	tail	dray	high
groat	trail	pray	sigh
boast	fair	stray	nigh
coast	hair	OU (=ow) List.	
roast	pair	bound	fight
toast	chair	found	light
	pain	hound	delight
	rain	mound	might
		pound	night
		round	right
		ground	bright
		around	fright
		sound	sight
			tight

EIG  
neig  
neig  
sleip  
eigh  
wei

Aft  
words,  
notati  
them t  
themse

This  
1. L  
of each  
letter i  
say in  
fuff; fo  
for m,  
the tril  
wow-wu

2. Th  
thinnes  
for join  
dʒ-dʒ-d

It is  
little pu  
an echo  
such on  
and feel  
them in  
sonant,  
sounds;  
so on, o  
words b  
would n

	EIGH List.	OUGH List.	OUGHT List.	OUGH (off) List.
house			bought	cough
mouse	neigh	bough	fought	trough
grouse	neighbour	plough	sought	rough
out	sleigh		thought	tough
about	eight		brought	enough
pout	weight			chough
spout				slough
sprout				
shout				
snout				
trout				
mouth				
south				
loud				
cloud				
aloud				
(=oo) List.				
soup				
group				
would				
could				
should				
H List.				
high				
sigh				
nigh				
fight				
light				
delight				
night				
night				
ight				
right				
ight				
ght				
ght				

## (B)

After the little learners have learned to recognise a number of words, and can read off easy sentences written in a self-consistent notation, it will become necessary, for future purposes, to teach them the *powers* and *natures* (the names they will soon pick up of themselves) of the letters.

This is best done by a process which consists of two steps :

1. Let the attention of the young class be called to the power of each letter, by running round the class words containing this letter in strong prominence. Thus, for *b*, let the little ones all say in turn, *bob-bob-bob*, etc.; for *d*, *did-did-did*; for *f*, *uff-uff-uff*; for *g*, *gig-gig-gig*; for *h*, *ha-ha-ha*; for *l*, *ull-ull-ull-ull*; for *m*, *mum-mum*; for *n*, *nun-nun*; for *p*, *pop-pop*; for *r*, only the trilling of the tongue; for *s*, *s-s-s-s*; for *t*, *tit-tat*, etc.; for *w*, *wow-wow*.

2. The second step is to fine and pare these words down to the thinnest sound of the letter, so that it may be in a fit condition for joining with others. Then the class will say only *ɛ-ɛ-ɛ-ɛ*; *dɛ-dɛ-dɛ-dɛ*; and so on.

It is a good thing for the Teacher to give his (or better, her) little pupils much practice in those words in which 'the sound is an echo to the sense.' It would be very useful to make a list of such onomatopoeitic words. They at once arouse the attention and feelings; and the children enjoy them, as they keep saying them in turn round the class. When they end in a double consonant, they intensify the attention of the child to the two sounds; and such words as *tramp*, *bark*, *lark*, *sing-song*, and so on, can hardly be too often repeated. The onomatopoeitic words *buzz*, *hiss*, *creak*, *crack*, *hum*, *shout*, and many others, it would not be difficult to make a list of,

## APPENDIX.

(C)

In teaching my own children, I have found that the difficult words in the first two pages of the First Primer were *the, this, that, has, had, an, and and*. These are words which are purely relational, and convey no image or emotion to the child's mind. Moreover, it was always found that the children found it much easier to point out these words when named than to name them themselves.

I have lately been giving lessons to an adult. It was wonderful to see how, after he had been presented with a stock of about twelve words, he worked his way through the First Primer without my telling him a single word. I asked him questions; I pointed to this word and to that; I printed words of the same final and of different initial letters under each other; I brought together a known element from one word and a known element from another, and asked him to combine them; but in no single instance—after he had received his small stock-in-trade of twelve words—did I tell him anything. And it was one of the most remarkable and pathetic sights I ever saw to see the awe and wonder of the young man as he felt his faculties slowly unfolding and stretching themselves out—like limbs that had been long atrophied and pulseless. If any Teacher wishes to test his art, to see how far it can carry him, and to witness one of its greatest and most encouraging triumphs, let him set to work and teach a completely ignorant adult. The specimens are becoming every day rarer; so he must make haste. It remains, however, to be seen whether in our hurry to have the fruit of our labours—whether in our haste to collect 'results,' we are not becoming mechanical, forceful, and unthinking in many of our so-called methods.

(D)

It has long escaped from the consciousness of grown-up people—it has passed completely into the 'river of forgetfulness,' how difficult and troublesome it was to take note of all the small points in each letter which make up its existence, differentiate it from other letters, and call for recognition. This was brought very strongly before my mind to-day in visiting a shop for stereotyping. I took up a paper matrix into which the leaden type is cast; and, though the words are printed straight

on just as they are in a book, I had the greatest possible difficulty in reading them—in reading matter which I had myself written. But the stereotyper could read from the stereotype plate, where all the words and letters come backward, just as easily as from a book; while the compositor can also read with perfect ease the words and letters backwards and upside down. Here, then, are three varieties of the problem—reading from the matrix, reading from the stereotype plate, and reading from the compositor's 'stick.' But the problem for the child is more difficult than any one or than all of these put together; because he has never seen these marks before, does not know the use of them, and has only a half-belief in the value of them. The thick strokes and the thin strokes, the straight lines and the crooked lines, the circles and the half-circles, the circles to the right and the circles to the left, the dots in some of the letters—the dots that adhere and the dots that are free, the strokes through other letters, the tips that hang down and the tips that stick up, the straight tails and the crooked tails, the openings at the top and the openings at the bottom, the letters with two limbs and the letters with three limbs, the square letters and the round letters, and the letters that are neither round nor square—all this seething confusion of forms puzzles and pains his eye. But my friend the stereotyper and myself both read as much by the help of what we *did not see* as of what we *did see*—we judged what was coming by what had come; and our expectations helped our judgments to a speedy decision. But the child has not this help. He must slowly and painfully work out each letter and each word. How absolutely necessary is it then to look out for every kind of aid for him—for aid from every quarter! A self-consistent notation is the very smallest demand he can make. This is a *sine quâ non*. But he will learn all the better if he has the aid of pictures and if easy modes of combination by the hand—as in the WORD-MAKER, are provided for him. If he is to learn to read at all—with a not too incommensurate expenditure of time—he must use every power, bodily and mental, that he has got.

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